



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

C45-3-4

Job Sheet 185266



Part No: C45-3-4

Job Qty: 10 ea

Part Name: Pin



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/24/18

Job Tracking No:

Due Date: 11/9/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG C45-3-4 REV 2A IPP REV A 18.02.14 NEW ISSUE FK VERIFY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	10 Ea		11/9/18	0.00	0.00	Start Up Machining-3		18/11/18
110	CNC Lathe	10 pcs		11/9/18	0.00	2.50	SL-154		18/11/18
120	QC	10 pcs		11/9/18	0.00	0.00	QC2 Machining-4		18/11/18
130	QC	10 pcs		11/9/18	0.00	0.00	QC8 Machining-4		18-12-01
140	Outsource	10 pcs		11/9/18			MEI001-VC (Atlantic)	10	CT18-12-5
170	Outsource	10 pcs		11/9/18			GRO002-VC	10	CT18-12-11
180	Packaging	10 pcs		11/9/18	0.00	0.00	Packaging2		DEC 18 2018
190	QC	10 pcs		11/9/18	0.00	0.00	QC6		38
210	Packaging	10 pcs		11/9/18	0.00	0.00	Packaging3-1		9-89
220	QC21-SA	10 Ea		11/9/18	0.00	0.00	QC21		21 DEC 19 2018

Part Op 110 - 1-Machine as per DWG. FB905 FOLIO REV: _____ DWG REV: _____ 2-Debur
Descriptions: 140 - 1--Issue P/O to Metcore ; P/O 041957 RC 53-56 2-Bead blast 3- Certificate of Conformity is required
NOTE DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech
170 - -Issue P/O to Groupe Altech: P/O 045006 -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 - Certificate of Conformity is required

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-O1-R0.1875	Tool Steel Round Bar 0.1875 dia.	.6500 ft (.065 ea)	90-Start up Operation	5046126

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-O1-R0.1875	1	4	0

Part Specifications

Specifications could not be found.



Container No: S133668



Part: C45-3-4

Job No: 185266

Serial No/Batch: S133668

Revision: 2A

Inspector:

Exp Date:

Instructions:

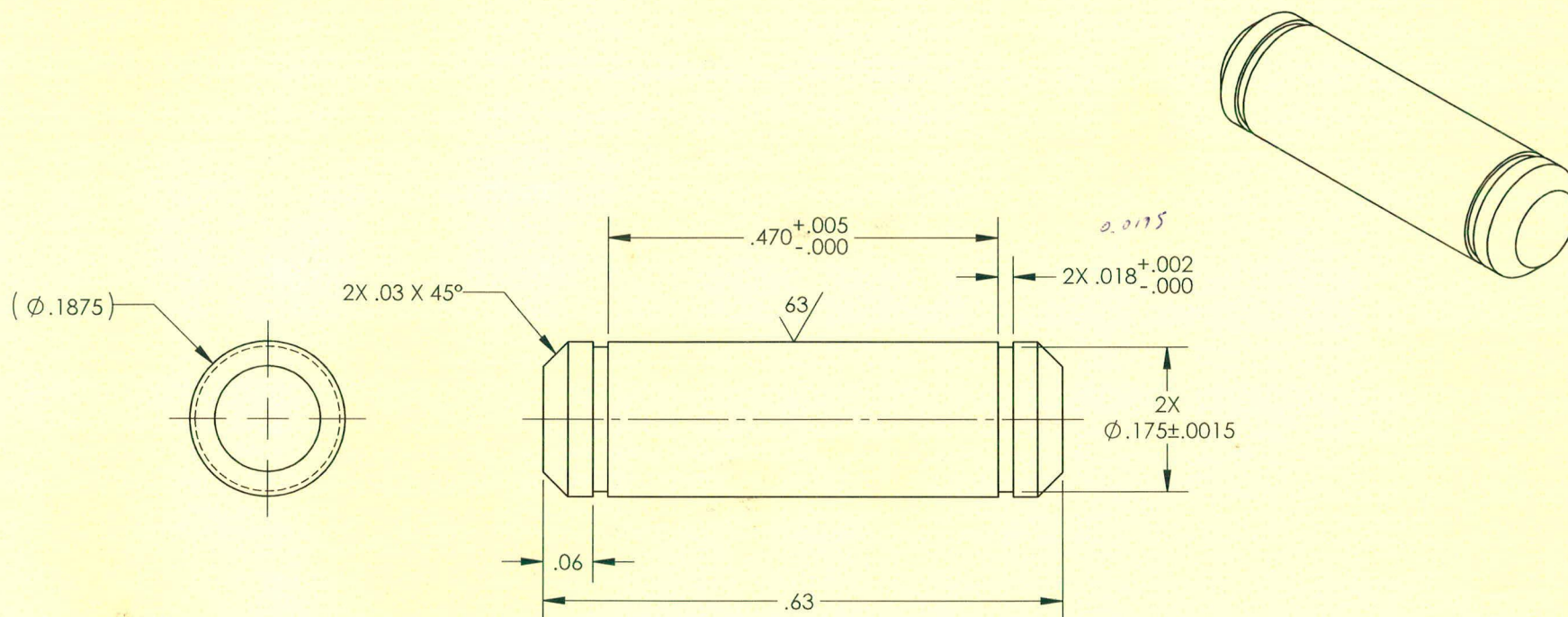
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 12/18/16

DEC 18 2016

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		AS DRAWN BY CANAM.	9/11/2012	JAG	
2		CH'D .018 DIM LIMITS WAS +.003/- .000 IS +.002/- .000, ADDED LIMITS TO .175DIM(+/- .0015), CH'D DIM SCHEME TO MEASURE DIST. BETWEEN GROVES WAS .506 +.001/- .000 IS .470+.005/- .000.	2/6/2013	BIM	SE
2A	14-0127	CH'D TITLE BLOCK WAS RED BARN IS DART. ADDED BAG & LABEL NOTE. DELETED DIM 2X .078. ADDED DIM .06. CH'D TOLERANCE ON NON-CRITICAL DIMENSIONS.	8/13/2014	DPD	RW



NOTE:
BAG & LABEL WITH BATCH NUMBER.

DART AEROSPACE	
TITLE LINK PIN	
DWG NO. C45-3-4	REV 2A
MAT'L 0-1 DRILL ROD	DRAWN BY: CANAM
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± 5°
.X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	APPROVED <i>D Weil</i>
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	HEAT TREAT HRC 53-56
	FINISH NICKEL PLATE
	SPEC .0004 - .0006 THICK
	USED ON MODEL
SCALE 5:1	DATE 8/15/1997
SHEET 1 OF 1	

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS
			C45-3-4	1	LINK PIN	0-1 DRILL ROD	Ø3/16 X 3/4

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



Container No: S133668



Part: C45-3-4

Job No: 185266

Serial No/Batch: S133668

Revision: 2A

Inspector:

Exp Date:

Instructions:

Date: 11/30/18

WORK ORDER NON CONFORMANCE / UPDATE



Work Order update only

AGAINST DEPARTMENT/PROCESS

be	Cross tube	Water Jet	Engineering
ng	Small Fab	Prod. Eng. Coord.	Quality
ng	Finishing	Rec/Store/Packaging	Other
ab	Composite	Supplier	

ective :

MRB (QSI042) Approval

Disposition

Completed By

Lead hand / Supervisor
Approval Verification

QC / QA Coordinator
Approval

Root Cause

Environment	No Re-verification
Design	Operator
Doc/Data	Offset/Setup
Equip/Tooling	Supplier
Handling/Pre	Training
Material	Use for Testing
Internal Transport	Poor Information
Tribal Knowledge	Rushing
LOA	Product Improvement
Substation	Process Improvement
Past Expiry Date	Manufacturing Process
Misidentified	Past Due

Pressure/Forced
Bending
Centre Not Concentric
Cracks
Crimp/Kink/Ripple/Wave
Cuffs
Crushing
Heat Treat
Wave/Twist in Tube
Marks/Chatter

FAULT CATEGORY

Temperature/Cure	Power Loss/Surge	Positioned Wrong
Set-up	Folio/Program	Outside Dimensions
BOM/Route	Grain	Over/Under tolerance
Broken/Damage/Defect	Weld	Part Incorrect
Inspection Incomplete/Unqualified	Wrong Stock Pulled	Part Lost/Missing
Contamination	Out of Sequence	Part Moved
Countersink	Off-set	Drawing
Cut Too Short	Mislabeled	Finish
Instructions Incomplete/Unclear	Fit/Function	Misread
Drill Holes	Misaligned/off center	Turning Sequence

OTHER :



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041957**

Supplier: ATL002-VC
Atlantic Heat Treat 2001
401 Frankcom
Ajax
ON
L1S R14 Canada
Phone: 866 257 6395

PO No: PO041957
PO Date: 12/5/18
Due Date: 12/10/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	185125	RBE117-12020-W14	Mounting Ring Input Main Gear Box 1--Issue P/O to Metcore ; P/O _____ RC 40-45 2-Bead blast 3- Certificate of Conformity is required 4-Black oxide finish, MIL-C-13924C Class 1 5-Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. 6-Material type; 4140 7-Certificate of Conformity is required	Firmed	-	12/10/18	4 pcs	0 pcs	4 pcs	\$53.625/pcs	\$214.50

Line Item Note ** ship back to Dart **
This part is a rush, so anything you could do to turn it over quickly would be appreciated :)



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041957**

Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
2		C45-3-4	Pin 1--Issue P/O to Atlantic; P/O RC 53-56 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech	Firmed	-	12/11/18	65 pcs	0 pcs	65 pcs	\$1.15385/pcs	\$75.00
										Grand Total:	\$289.50

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 12/10/18 12:32 PM dart.tsimiklis.chrisoula

Shipping Ticket

Sold To:

1448

DART AEROSPACE LTD.
1270 ABERDEEN ST

HAWKESBURY ON K6A 1K7

Ship To:

158298

DART AEROSPACE LTD.
1270 ABERDEEN ST

HAWKESBURY ON K6A 1K7

Page 1 of 1

Purchase Order Number	Packing List No	Customer Job No	Route	Carrier
PO041957 ✓				

Quantity	Part No. / Part Name / Part Description	Pounds
	65 PCS MATERIAL 01 SAND BLAST AND HEAT TREAT TO 53-56RC C OF C, PRT# C45-3-4 ✓	

Container Type	# Of Containers	Cust Cont Id	Container Type	# Of Containers	Cust Cont Id
BOX	1				

NOTICE: OUR LIABILITY IS LIMITED TO OUR INVOICE CHARGES ONLY

Shipped Complete

Quantity Shipped:

65

Pounds Shipped:

1.00

Order No.: 161219

Shipped Complete

Quantity Shipped:

65.00

Received By:

Date:

Pounds Shipped:

1.00

Sold To: DART AEROSPACE LTD.

Shipped ON: 12/07/2019

Certification

Date: 12/10/2018

Entry Date: 12/07/2018

Page: 1 of 1

To:DART AEROSPACE LTD.
1270 ABERDEEN ST

Purchase Order No.: PO041957

Packing List No.:

HAWKESBURY ON K6A 1K7

Material: 01

We are pleased to provide you with the following Certificate of Compliance.

Quantity	Part Number / Part Name / Part Description	Pounds
65	65 PCS MATERIAL 01 SAND BLAST AND HEAT TREAT TO 53-56RC C OF C, PRT# C45-3-4	1

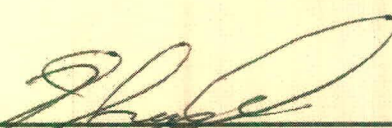
Insp. Type	Scale	Minimum	Maximum	Number	Other
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Customer Requirements:

Harden rockwell

Results:Harden ROCKWE 53. 56. 54. TESTED AS PER SAMPLING PLAN
HEAT TREATED TO 54 RC AS PER CUSTOMER REQUEST

STATEMENT OF LIMITED LIABILITY (PLEASE READ CAREFULLY). ALL WORK IS ACCEPTED SUBJECT TO THE FOLLOWING CONDITIONS: It is recognized that even after employing all the scientific methods known to us, hazards still remain in metal treating. THEREFORE, OUR LIABILITY SHALL NOT EXCEED TWICE THE AMOUNT OF OUR CHARGES FOR THE WORK DONE ON ANY MATERIAL (FIRST TO REIMBURSE FOR THE CHARGES AND SECOND TO COMPENSATE IN THE AMOUNT OF THE CHARGES), EXCEPT BY WRITTEN AGREEMENT SIGNED BY THE METAL TREATER. THE CUSTOMER, BY CONTRACTING FOR METAL TREATMENT, AGREES TO ACCEPT THE LIMITS OF LIABILITY AS EXPRESSED IN THIS STATEMENT TO THE EXCLUSION OF ANY AND ALL PROVISIONS AS TO LIABILITY ON THE CUSTOMER'S OWN INVOICES, PURCHASE ORDERS OR OTHER DOCUMENTS. IF THE CUSTOMER DESIRES HIS OWN PROVISIONS AS TO LIABILITY TO REMAIN IN FORCE AND EFFECT, THIS MUST BE AGREED TO IN WRITING, SIGNED BY AN OFFICER OF THE TREATER. IN SUCH EVENT, A DIFFERENT CHARGE FOR OUR SERVICES REFLECTING THE HIGHER RISK TO TREATER, SHALL BE DETERMINED BY THE TREATER AND CUSTOMER. THE TREATER MAKES NO EXPRESS OR IMPLIED WARRANTIES AND SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF THE FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, AS TO THE PERFORMANCE OF CAPABILITIES OF THE MATERIAL AS HEAT TREATED, OR THE HEAT TREATMENT. THE AFOREMENTIONED LIMITATION OF LIABILITY STATED ABOVE IS SPECIFICALLY IN LIEU OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, AND OF ANY OTHER SUCH OBLIGATION ON THE PART OF THE TREATER. No claim for shortage in weight or count will be entertained unless presented within five (5) working days after receipt of materials by customer. No claim will be allowed for shrinkage, expansion, deformity, or rupture of material in treating or straightening, except by prior written agreement, as above; nor in any case for rupture caused by or occurring during subsequent grinding. Whenever we are given material with detailed instructions as to treatment, our responsibility shall end with the carrying out of those instructions. Failure by a customer to indicate plainly and correctly the kind of material (i.e., proper alloy designation) to be treated, shall cause an extra charge to be made to cover any additional expense incurred as a result thereof, but shall not change the limitation of liability stated above. Customer agrees there will be no liability on the treater in contract for any special, indirect or consequential damages arising whatsoever, including but not limited to personal injury, property damage, loss of profits, loss of production, recall or any other losses, expenses or liabilities allegedly occasioned by the work performed on the part of the treater. It shall be the duty of the customer to inspect the merchandise immediately upon its return, and in any event claims must be reported prior to the time that any further processing, assembling or any other work undertaken. OUR LIABILITY TO OUR CUSTOMERS SHALL CEASE ONCE ANY FURTHER PROCESSING, ASSEMBLING OR ANY OTHER WORK HAS BEEN UNDERTAKEN ON SAID MATERIAL. No agent or representative is authorized to alter the above conditions, except by writing duly signed by an officer of treater.


KEAN SHEPHERD
QUALITY CONTROL
ATLANTIC HEAT TREATING 2001 LTD



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO042006**

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO042006
PO Date: 12/11/18
Due Date: 12/17/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, Chrisoula

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments: *advise with fastest lead time please *

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	185874	C3-13-4-2	Keeperless Adapter -Issue P/O to Groupe Altech: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 -Bake after plating -Certificate of Conformity is required	Firmed	-	12/17/18	5 pcs	0 pcs	5 pcs	\$5.5144927/pcs	\$27.57
2	185266	C45-3-4	Pin -Issue P/O to Groupe Altech: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 - Certificate of Conformity is required	Firmed	-	12/17/18	64 pcs	0 pcs	64 pcs	\$5.5144927/pcs	\$352.93
Grand Total:											\$380.50

revised

or



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO042006

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 12/17/18 8:12 AM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(015248-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

015248 - 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
14-Dec-2018		Aman			042006 ✓			
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	C3-13-4-2 ✓ Rev.	C3-13-4-2 01 -E-NIC STEEL 200 [E-NICKEL STEEL 200] QQ-N-290 CLASS 2 GRADE E 0.0004-0.0006 THICK BAKE AFTER PLATING	E-NICKEL STEEL CH	5	5 ✓	0	0	0
2	C45-3-4 ✓ Rev.	C45-3-4 01 -E-NIC STEEL 500 [E-NICKEL STEEL 500] QQ-N-290 , CLASS 2, GRADE E TO F: .0004 - .0006 ***	E-NICKEL-500 CH	64	64 ✓	0	0	DAS 038 9-89

Notes Additionnelles / Additional Notes

Épaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.

